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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/015,015

Filing Date: 12/11/2001

Appellant(s): ANDERSON, ERIC

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Technology Center 2100

Jody Bishop For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 10/2/06 appealing from the Office action mailed 7/18/06.

## (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

## (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

## (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

## (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

# (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (8) Evidence Relied Upon

6,620,205	Sequeira	9-2003
6,976,165	Carpentier et al.	12-2005
6,839,680	Liu et al.	1-2005
6,834,110	Marconcini et al.	12-2004
6,820,133	Grove et al.	11-2004

# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

- A. Claims 1-5, 8-22, 26-31, 36, and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,620,205 issued to Sequeira (hereinafter "Sequeira") in view of U.S. Patent No. 6,976,165 issued to Carpentier et al. (hereinafter "Carpentier") and further in view of U.S. Patent No. 6,839,680 issued to Liu et al. (hereinafter "Liu").
- B. Claims 6 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sequeira in view of Carpentier and in view of Liu and further in view of U.S. Patent No. 6,834,110 issued to Marconcini et al. (hereinafter "Marconcini").

C. Claims 23-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sequeira in view of Carpentier and in view of Liu and further in view of U.S. Patent No. 6,820,133 issued to Grove et al. (hereinafter "Grove").

D. Claims 32-35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sequeira in view of Liu.

# **Applicant Invention discloses:**

A content management system, which processes a partitioned web page with each partition designated by an identifier and based on the identifier utilizing local and remote storage for content retrieval.

1. This action is responding to application amendment filed 4/18/2006. Claims 1 - 37 are pending. Independent claims are 1, 22 and 32.

# Claim Rejection - 35 USC § 103

Claims 1 - 5, 8 - 22, 26 - 31, 36, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sequeira (US Patent No. 6,620,205) in view of Carpentier et al. (US Patent No. 6,976,165) and further in view of Liu et al. (US Patent No. 6,839,680).

Regarding Claim 1, Sequeira discloses a method for content delivery, comprising:

- a) requesting a piece of content; (see Sequeira col. 4, lines 33-36: user requests content from a web server)
- b) delimiting the piece of content into one or more portions at a source; (see Sequeira col. 7, lines 21-27: content is divided (delimited) into partitions (portions))
- d) sending the identifier to a destination; (see Sequeira col. 6, lines 40-45: identifier transmitted to destination)

Sequeira discloses associating an identifier with a selected one of the one or more portions of the content; (see Sequeira col. 8, lines 3-6: identifier attached to each partition (portion)) Sequeira does not specifically disclose an identifier computed from a particular portion of content or utilization of cache techniques to manage data.

However, Carpentier discloses:

c) wherein said identifier computed from the selected one of the one or more portions of the content; (see Carpentier col. 6, lines 4-8: digital data; col. 7, lines 28-33: identifier generated (i.e. computed) from content)

And, Liu discloses:

e) looking up the identifier at the destination and, if the identifier is found, retrieving the associated portion of content at the destination and, if the identifier is not found, receiving the associated portion of content from the source. (see Liu col.

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54, lines 15-23: cache techniques for data management, cache subsystem associates document (content) with categorization (identifiers))

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to enable an identifier to be generated (i.e. computed) from content as taught by Carpentier, and to utilize cache technology as taught by Liu. One of ordinary skill in the art would be motivated to employ Carpentier in order to enable efficient security for digital information and the assurance that a file can be uniquely identified and kept secure (see Carpentier col. 3, lines 30-38: "... provide efficient and near foolproof security for digital information and/or its respective unique identifiers ... provide a user with the assurance that not only can a file be uniquely identified, but also that the file can be kept secure from prying eyes and its integrity can be guaranteed ... "), and to employ Liu in order to improve content distribution by creating robust, accurate and maintainable performance techniques for content distribution utilizing network communications (see Liu col. 3, lines 29-31: "... automatically categorize the documents ... categorization technique should be robust, accurate and maintainable ... ").

Regarding Claim 2, Sequeira discloses the method according to claim 1, wherein if the identifier is not found, the method further comprises storing the identifier and the associated portion of content at the destination. (see Sequeira col. 6, lines 40-45: identifier and content transmitted and stored at destination)

Regarding Claim 3, Sequeira discloses wherein storing the identifier and the associated portion of the content at the destination. (see Sequeira col. 6, lines 40-45: identifier and content transmitted to destination) Sequeira does not specifically disclose a look-up table at destination. However, Liu discloses the method according to claim 1, wherein further comprising a look-up table at the destination. (see Liu col. 54, lines 15-23: look-up table for content management utilizing cache techniques)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu. One of ordinary skill in the art would be motivated to employ Liu in order to create robust, accurate and maintainable performance techniques for content distribution in network communications. (see Liu col. 3, lines 29-31)

Regarding Claim 4, Sequeira does not disclose the method according to claim 3, wherein the look-up table memory comprises a content addressable memory (CAM). (see Liu col. 54, lines 2-11: cache subsystem associates document (content) with categorization (identifiers))

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu.

One of ordinary skill in the art would be motivated to employ Liu in order to create robust and accurate performance techniques for content distribution in a network. (see Liu col. 3, lines 29-31)

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Regarding Claim 5, Sequeira discloses the method according to claim 1, further comprising computing the identifier from data contents of the associated portion of content. (see Sequeira col. 7, lines 31-39; col. 8, lines 3-6: content information generated based on HTML data)

Regarding Claim 8, Sequeira discloses a content delivery system wherein the source sends the identifier. (see Sequeira col. 6, lines 40-45: identifier sent to destination)

And, Liu discloses the method according to claim 1, waits for an indication from the destination before sending the associated portion of content. (see Liu col. 54, lines 15-23: cache techniques, whether content is in cache determines if content is sent)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu.

One of ordinary skill in the art would be motivated to employ Liu in order to utilize robust and accurate performance techniques for content distribution in a network. (see Liu col. 3, lines 29-31)

Regarding Claim 9, Sequeira discloses wherein the source sends identifier and associated portion of content. (see Sequeira col. 6, lines 40-45: identifier and content distributed to destination) Sequeira does not specifically disclose that if information is located in cache then do not send information from database. However, Liu discloses the method according to claim 1, wherein if the identifier is found at the destination, the destination interrupts sending of the associated portion of content. (see Liu col. 54, lines

15-23: cache techniques, whether content is in cache determines if content is sent)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu.

One of ordinary skill in the art would be motivated to employ Liu in order to utilize robust and accurate performance techniques for content distribution in a network. (see Liu col. 3, lines 29-31)

**Regarding Claim 10**, Sequeira discloses the method according to claim 1, wherein the piece of content is a web page. (see Sequeira col. 9, lines 36-38: content partitioned for a web page)

**Regarding Claim 11**, Sequeira discloses the method according to claim 1, wherein the piece of content includes dynamic and static content. (see Sequeira col. 6, lines 57-62: content partition (portion) categorized as static or dynamic)

Regarding Claim 12, Sequeira discloses the method according to claim 11, wherein said one or more portions include at least one portion consisting of static content. (see Sequeira col. 6, lines 57-62: content partition (portion) categorized as static)

Regarding Claim 13, Sequeira discloses the method according to claim 12, wherein said one or more portions include at least one portion containing mixed or dynamic content. (see Sequeira col. 6, lines 57-62: content partition (portion) categorized as

static and dynamic content partitions (portions))

Regarding Claim 14, Sequeira discloses the method according to claim 13, further comprising assigning a respective identifier to each portion consisting of static content. (see Sequeira col. 8, lines 3-6: identifiers assigned to partitions (portions)) Sequeira does not specifically disclose an identifier computed from the assigned content portion. However, Carpentier discloses wherein said respective identifier computed from the assigned portion. (see Carpentier col. 6, lines 4-8: digital data; col. 7, lines 28-33: identifier generated (i.e. computed) from content)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to enable an identifier to be generated (i.e. computed) from content as taught by Carpentier. One of ordinary skill in the art would be motivated to employ Carpentier in order to enable efficient security for digital information and the assurance that a file can be uniquely identified and kept secure (see Carpentier col. 3, lines 30-38)

Regarding Claim 15, Sequeira discloses the method according to claim 1, wherein said one or more portions are of fixed size. (see Sequeira col. 9, lines 38-41: partitions (portions) sized (fixed size) to be completely displayed on monitor)

Regarding Claim 16, Sequeira discloses the method according to claim 1, wherein said one or more portions are of variable size. (see Sequeira col. 9, lines 38-41)

Regarding Claim 17, Sequeira discloses the method according to claim 1, wherein said delimiting is performed by comparing the piece of content to another piece of content and determining which portions are common to both. (see Sequeira col. 7, lines 31-39: web page partitioned (portions) based on HTML data contents)

Regarding Claim 18, Sequeira discloses the method according to claim 1, wherein said delimiting is performed based on features contained within the piece of content. (see Sequeira col. 7, lines 31-39: content partitioning (delimited) based on content features (animated graphics or dynamic))

Regarding Claim 19, Sequeira discloses the method according to claim 18, said features including white or blank space to be displayed. (see Sequeira col. 7, lines 31-39: content partitioned based on content features)

Regarding Claim 20, Sequeira discloses at least one portion received from source (see Sequeira col. 6, lines 40-45: partition (portion) retrieved from server (source)) Sequeira does not specifically disclose one portion retrieved from destination. However, Liu discloses the method according to claim 1, further comprising assembling the piece of content at the destination from at least one portion retrieved at the destination. (see Liu col. 54, lines 15-23: cache techniques, search and retrieve content information from cache)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu.

One of ordinary skill in the art would be motivated to employ Liu in order to utilize robust and accurate performance techniques for content distribution in a network. (see Liu col. 3, lines 29-31)

Regarding Claim 21, Sequeira discloses the method according to claim 1, said sending being via a wide area network. (see Sequeira col. 4, lines 20-26: Internet content indicates interconnected network of LANs and WANs (wide area network) in a internetwork)

**Regarding Claim 22**, Sequeira discloses an apparatus for delivery of content data comprising:

Sequeira discloses wherein a source having a plurality of stored pieces of content, the source for receiving requests for content, delimiting the pieces of content into portions and assigning said identifiers to the portions of content; (see Sequeira col. 7, lines 21-27; col. 8, lines 3-6: content partitioned (portions) with identifiers)

And, Sequeira discloses a destination coupled to the source via a network (see Sequeira col. 4, lines 20-26: network connected server (source)), the destination for providing the requests for content (see Sequeira col. 4, lines 33-36: server receives requests for content), receiving the identifiers from the source in response to the

requests (see Sequeira col. 6, lines 40-45: identifiers sent from source to destination)
Sequeira does not specifically disclose a look-up table.

However, Carpentier discloses:

a) wherein, computing identifiers from said portions of content, and assigning said identifiers to the portions of content from which said identifiers are computed (see Carpentier col. 6, lines 4-8: digital data; col. 7, lines 28-33: identifier generated (i.e. computed) from content)

And, Liu discloses:

b) wherein looking up the identifiers in a look-up table at the destination, and wherein when an identifier is found in the table, the destination retrieves an associated portion of content from the table and when the identifier is not found in the table, the destination receives the associated portion of content from the source via the network. (see Liu col. 54, lines 15-23: cache techniques, whether content is in cache determines if content is sent)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to enable an identifier to be computed (i.e. generated) from content as taught by Carpentier, and to utilize cache technology as taught by Liu. One of ordinary skill in the art would be motivated to employ Carpentier in order to enable efficient security for digital information and the assurance that a file can be uniquely identified and kept secure (see Carpentier col. 3, lines 30-38), and to employ Liu in order to create robust, accurate and maintainable performance techniques for content distribution in network communications (see Liu col. 3, lines 29-

31).

Regarding Claim 26, Sequeira discloses the destination receives the associated portion of content from the source. (see Sequeira col. 6, lines 40-45: content retrieved from source) Sequeira does not specifically disclose determining whether content is within cache. However, Liu discloses the apparatus according to claim 22 wherein the destination stores the identifier and the associated portion of content in the table. (see Liu col. 54, lines 15-23: cache techniques utilized, identifier is stored in a cache table for data management)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu. One of ordinary skill in the art would be motivated to employ Liu in order to create robust, accurate and maintainable performance techniques for content distribution in network communications. (see Liu col. 3, lines 29-31)

Regarding Claim 27, Sequeira discloses the method wherein the source sends the identifier. (see Sequeira col. 6, lines 40-45: identifier sent to destination) Sequeira does not specifically disclose determining whether content is within cache. However, Liu discloses the method according to claim 22, wherein the source waits for an indication from the destination before sending the associated portion of content. (see Liu col. 54, lines 15-23: cache techniques, whether content is in cache determines if content is sent)

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu. One of ordinary skill in the art would be motivated to employ Liu in order to create robust, accurate and maintainable performance techniques for content distribution in network communications. (see Liu col. 3, lines 29-31)

Regarding Claim 28 Sequeira discloses wherein the source sends the identifier and the associated portion of content. (see Sequeira col. 6, lines 40-45: identifier and content sent to destination) Sequeira does not specifically disclose determining whether content is within cache. However, Liu discloses the method according to claim 22, if the identifier is found at the destination, the destination interrupts sending of the associated portion of content. (see Liu col. 54, lines 15-23: cache techniques, whether content is in cache determines if content is sent)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu. One of ordinary skill in the art would be motivated to employ Liu in order to create robust, accurate and maintainable performance techniques for content distribution in network communications. (see Liu col. 3, lines 29-31)

Regarding Claim 29, Sequeira discloses the method according to claim 22, wherein the source attempts to delimit the portions into those which consist of static content and those which contain dynamic or mixed content. (see Sequeira col. 6, lines 57-62:

content partitioned (portions) into static and dynamic content)

Regarding Claim 30, Sequeira discloses the apparatus according to claim 29, wherein the source attempts to delimit the portions into those which consist of static content and those which contain dynamic or mixed content by comparing pieces of content to each other and determining which portions are common. (see Sequeira col. 6, lines 57-62: content partitioned (portions) into static and dynamic content)

Regarding Claim 31, Sequeira discloses the method according to claim 29, wherein the source attempts to delimit the portions into those which consist of static content and those which contain dynamic or mixed content based on features contained within the piece of content. (see Sequeira col. 6, lines 57-62: content partitioned (portions) into static and dynamic content based on features)

Regarding Claim 36, Carpentier discloses the method according to claim 32 further comprising: computing said identifier from said selected one of the one or more portions of the content. (see Carpentier col. 7, lines 28-33: identifier generated (i.e. computed) from content)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to enable an identifier to be generated (i.e. computed) from content as taught by Carpentier. One of ordinary skill in the art would be motivated to employ Carpentier in order to enable efficient security for digital

information and the assurance that a file can be uniquely identified and kept secure (see Carpentier col. 3, lines 30-38)

Regarding Claim 37, Carpentier discloses the method according to claim 36 wherein said computing comprises computing at least one selected from the group consisting of: a checksum, hash, or other value that is determinative of said selected one of the one or more portions of the content. (see Carpentier col. 7, lines 28-33; identifier generated (i.e. computed) from content)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to enable an identifier to be generated (i.e. computed) from content as taught by Carpentier. One of ordinary skill in the art would be motivated to employ Carpentier in order to enable efficient security for digital information and the assurance that a file can be uniquely identified and kept secure (see Carpentier col. 3, lines 30-38)

3. Claims 6, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sequeira-Carpentier-Liu and further in view of Marconcini et al. (US Patent No. 6,834,110).

**Regarding Claim 6**, Sequeira discloses usage of hash algorithm to generate hash values. (see Sequeira col. 11, lines 40-43: hash techniques utilized) Sequeira does not specifically disclose the usage of MD-5 algorithm in hash generation. However,

Marconcini discloses the method according to claim 5, wherein the identifier is a MD-5 hash value. (see Marconcini col. 17, lines 1-4; col. 17, lines 10-12: MD-5 hash generation)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to generate a hash value utilizing the MD-5 hash algorithm as taught by Marconcini. One of ordinary skill in the art would be motivated to employ Marconcini in order to optimize secure delivery of content over communications network. (see Marconcini col. 1, lines 12-18;: "... a system and related tools for the secure delivery and rights management of digital assets, such as print media, films, games, and music over global communications networks such as the Internet ... cable or satellite digital broadcast networks ... "; col. 1, 55-57: "... a secure, global distribution system for digital content that protects the rights of content owners ...")

Regarding Claim 7, Sequeira discloses usage of hash algorithm to generate hash values. (see Sequeira col. 11, lines 40-43: hash techniques utilized) Sequeira does not specifically disclose the usage of SHA-1 algorithm to generate a hash value. However, Marconcini discloses the method according to claim 6, wherein the identifier is a SHA-1 hash value. (see Marconcini col. 17, lines 1-4; col. 17, lines 10-12: SHA-1 hash generation)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to generate a hash value utilizing the MD-5

hash algorithm as taught by Marconcini. One of ordinary skill in the art would be motivated to employ Marconcini in order to optimize secure delivery of content over communications network. (see Marconcini col. 1, lines 12-18; col. 1, 55-57)

4. Claims 23 - 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sequeira-Carpentier-Liu and further in view of Grove et al. (US Patent No. 6,820,133).

Regarding Claim 23, Sequeira discloses a server for storing the pieces of content and delimiting portions of the pieces of content. (see Sequeira col. 9, lines 16-22: identifier and content stored in table) Sequeira does not specifically disclose a far proxy server. However, Grove discloses the apparatus according to claim 22, wherein the source is a far proxy. (see Grove col. 5, lines 57-62; col. 12, lines 51-54: proxy server located at a "not close" (far) location)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize a proxy server located near the server (source) system as taught by Grove. One of ordinary skill in the art would be motivated to employ Grove in order to optimize and improve communications performance over a communications network. (see Grove col. 4, lines 57-62: "... improving the performance of Internet communication, particularly communication between web clients and web servers ... ")

Regarding Claim 24, Sequeira discloses the apparatus according to claim 23, wherein the server comprises a web server. (see Sequeira col. 4, lines 20-26; web server utilized for content management)

Regarding Claim 25, Sequeira discloses the destination comprising a recipient of content and for looking up identifiers received from the source in the table (see Sequeira col. 9, lines 16-22: identifier and content stored in table) Sequeira does not specifically disclose a near proxy server. However, Grove discloses the apparatus according to claim 22, wherein the source is a near proxy. (see Grove col. 5, lines 57-62; col. 12, lines 51-54: proxy server located at a "close" (near) location)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize a proxy server located near the server (source) system as taught by Grove. One of ordinary skill in the art would be motivated to employ Grove in order to optimize and improve communications performance over a communications network. (see Grove col. 4, lines 57-62)

5. Claims 32 - 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sequeira (US Patent No. 6,620,205) in view of Liu et al. (US Patent No. 6,839,680).

Regarding Claim 32, Sequeira discloses a method for content delivery, comprising:

a) requesting a piece of content; (see Sequeira col. 4, lines 33-36: user requests content from a web server)

- b) delimiting the piece of content into one or more portions at a source; (see Sequeira col. 7, lines 21-27: content is divided (delimited) into partitions (portions))
- c) associating an identifier with a selected one of the one or more portions of the content; (see Sequeira col. 8, lines 3-6: identifier attached to each partition (portion))

Sequeira does not specifically disclose utilization of cache techniques to manage data. However, Liu discloses:

e) determining whether to send the selected one or more portions of content of the identifier to the destination based on information at the source which is analogous to looking up the identifier at the destination and, if the identifier is found, retrieving the associated portion of content at the destination and, if the identifier is not found, receiving the associated portion of content from the source. (see Liu col. 54, lines 15-23: cache techniques for data management, cache subsystem associates document (content) with categorization (identifiers))

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu. One of ordinary skill in the art would be motivated to employ Liu in order to create robust, accurate and maintainable performance techniques for content distribution in network communications. (see Liu col. 3, lines 29-31)

Regarding Claim 33, Sequeira discloses wherein said determining comprising looking

up the identifier at the source. (see Sequeira col. 9, lines 16-22: partition (portion) identifier table) Sequeira does not specifically disclose wherein if identifier is not found, content portion is sent to destination. However, Liu discloses the method according to claim 32, wherein if the identifier is not found at the source, the method further comprising sending the portion to the destination. (see Liu col. 54, lines 15-23: cache techniques, whether content is in cache determines if content is sent)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu. One of ordinary skill in the art would be motivated to employ Liu in order to create robust, accurate and maintainable performance techniques for content distribution in network communications. (see Liu col. 3, lines 29-31)

Regarding Claim 34, Sequeira discloses wherein storing the identifier and the associated portion of the content at the destination. (see Sequeira col. 6, lines 40-45: identifier and content transmitted to destination) Sequeira does not specifically disclose a look-up table at destination. However, Liu discloses the method according to claim 33, wherein further comprising a look-up table at the destination. (see Liu col. 54, lines 15-23: look-up table for content management utilizing cache techniques)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sequeira to utilize cache technology as taught by Liu.

One of ordinary skill in the art would be motivated to employ Liu in order to create robust, accurate and maintainable performance techniques for content distribution in

network communications. (see Liu col. 3, lines 29-31)

**Regarding Claim 35**, Sequeira discloses the method according to claim 33, further comprising storing the identifier in a table at the source. (see Sequeira col. 9, lines 16-22: identifier stored in table)

#### (10) Response to Arguments

- A. Claims 1-5, 8-22, 26-31, 36, and 37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,620,205 issued to Sequeira (hereinafter "Sequeira") in view of U.S. Patent No. 6,976,165 issued to Carpentier et al. (hereinafter "Carpentier") and further in view of U.S. Patent No. 6,839,680 issued to Liu et al. (hereinafter "Liu").
- A.1: Applicant argues, "... insufficient motivation to combine the applied references and the applied combination thereof fails to teach or suggest all the claim limitations ... " (see Appeal Remarks Page 8, Lines 5-6); "... lack of motivation to combine the references in the manner applied... " (see Appeal Remarks Page 13, Line 1); "... no motivation exists for combining the teachings of Sequeira and Liu. These references are non-analogous art that are each attempting to solve a different problem ... " (see Appeal Remarks Page 13, Lines 15-16); "... Lack of Motivation, Claim 27, 28, 29, 30, 31, 36, 37 ... " (see Appeal Remarks Pages 21-24)

- A.2: Applicant argues, " ... associating an identifier with a selected one of the one or more portions of the content where the identifier is computed from the selected one of the one or more portions of the content ... " (see Appeal Remarks Page 9, Lines 28-29); " ... associating an identifier with a selected one of the one or more portions of the content" where the identifier is computed from the selected one of the one or more portions of the content. ... " (see Appeal Remarks Page 10, Lines 22-24)
- A.3: Applicant argues, "... combination further fails to teach or suggest looking up the identifier at a destination and, if the identifier is found, retrieving the associated portion of content at the destination and, if the identifier is not found, receiving the associated portion of content from the source, as discussed further below ... "

  (see Appeal Remarks Page 9, Line 30 Page 10, Line 1); "... looking up such an identifier at a destination and, if the identifier is found, retrieving the associated portion of content at the destination and, if the identifier is not found, receiving the associated portion of content from the source ... " (see Appeal Remarks Page 11, Lines 18-20); "... provides no teaching or suggestion of using the computed identifier for looking up such an identifier at a destination and, if the identifier is found, retrieving the associated portion of content at the destination and, if the identifier is not found, receiving the associated portion of content from the source ... " (see Appeal Remarks Page 11, Lines 23-26); "... looking up the identifier at

the destination and, if the identifier is found retrieving the associated portion of content at the destination and, if the identifier is not found receiving the associated, portion of content from the source ... " (see Appeal Remarks Page 11, Line 30 - Page 12, Line 1); " .... wherein the source sends the identifier and the associated portion of content and, if the identifier is found at the destination, the destination interrupts sending of the associated portion of content. ... " (see Appeal Remarks Page 17, Lines 1-3); " ... "looking up the identifiers in a look-up table at the destination, and wherein when an identifier is found in the table, the destination retrieves an associated portion of content from the table and when the identifier is not found in the table, the destination receives the associated portion of content from the source via the network" ... " (see Appeal Remarks Page 20, Lines 21-24); " ... looking up an identifier for a piece of content that includes dynamic and static content, wherein if the identifier is found the piece of content is retrieved at the destination and if the identifier is not found the piece of content is received from the source ... " (see Appeal Remarks Page 17, Lines 20-23);

A.4: Applicant argues, " ... using an identifier in the above manner for dynamic and static content ... " (see Appeal Remarks Page 17, Line 25); " ... dynamic content may simply be marked as UNCACHEABLE, rather than using an identifier in the above manner for such dynamic content ... " (see Appeal Remarks Page 17, lines 26-28);

- A.5: Applicant argues, "... Dependent Claim 13, Dependent Claim 17, Dependent Claim 18, Dependent Claim 19 ... " (see Appeal Remarks Page 18 19)
- A.6: Applicant argues, "... "computing identifiers from said portions of content, and assigning said identifiers to the respective portions of content from which said identifiers are computed" ... " (see Appeal Remarks Page 20, Lines 19-21)
- A.7: Applicant argues, " ... sending an identifier to a destination and awaiting an indication from the destination before sending the associated content ... " (see Appeal Remarks Page 21, Lines 18-19)
- **B.** Claims 6 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sequeira in view of Carpentier and in view of Liu and further in view of U.S. Patent No. 6,834,110 issued to Marconcini et al. (hereinafter "Marconcini").
  - **B.1: Applicant argues that**, " ... that dependent claims 6-7 are allowable at least because of their dependency from independent claim 1 for the reasons discussed above ... " (see Appeal Remarks Page 24, Lines 11-12)
- C. Claims 23-25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sequeira in view of Carpentier and in view of Liu and further in view of U.S. Patent No. 6,820,133 issued to Grove et al. (hereinafter "Grove").

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C.1: Applicant argues that, " ... dependent claims 23-25 are allowable at least because of their dependency from independent claim 22 for the reasons discussed above ... " (see Appeal Remarks Page 24, Lines 19-21)

**D.** Claims 32-35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sequeira in view of Liu.

- D.1: Applicant argues that, " ... No determination is made at the source as to whether to send selected one or more portions of content or an identifier to a destination. Additionally, no portions or identifiers are described in Liu, and no such determination is made by Liu's system. ... " (see Appeal Remarks Page 25, Lines 22-24)
- **D.2: Applicant argues**, " ... said determining comprising looking up the identifier at the source and, if the identifier is not found at the source, the method further comprising sending the portion to the destination. ... " (see Appeal Remarks Page 26, Lines 15-17)

## **Examiner Response to Argument dated October 2, 2006**

The Examiner's Rejection is proper given that the cited passages of **Sequeira** (6,620,205), **Carpentier** (6,976,165), **Liu** (6,839,680), **Marconcini** (6,834,110), and **Grove** (6,820,133) disclose the Applicant's claimed invention.

#### As to Point A.1:

All referenced prior art are content delivery and content manipulation systems operating within a web based network environment. The specifics of each prior art may differ, but all of the referenced prior art operates within the same type of environment utilizing the same type of data.

- (1) Sequeira (6,620,205): (see col. 2, lines 49-52; col. 2, line 64 col. 3, line 3: content delivery system, web based environment);
- (2) Carpentier (6,976,165): (see col. 6, lines 4-8; col. 13, lines 29-33: content delivery system, web based environment);
- (3) Liu (6,839,680): (see col. 2, lines 22-26: content delivery system, web based environment);
- (4) Marconcini (6,834,110): (see col. 9, lines 30-34; col. 9, lines 38-41; col. 10, lines 20-23: content delivery system, web based environment);
- (5) Grove (6,820,133): (see col. 5, lines 5-7; col. 5, lines 11-15: content delivery system, web based environment).

Internet content manipulation and management system utilizing a request and response mechanism is the category Applicant's Invention is within.

The referenced prior art discloses the display of content utilizing Internet technology. Internet (i.e. HTTP) technology utilizes a server that delimits and formats the different types of contents of a web page before transmission to client (i.e. browser). The client follows pre-setup (i.e. HTML delimiting) commands and procedures to parse and format the content for a web page at the server (i.e. source) before transmission and display by a browser.

All referenced prior art are content delivery and content manipulation systems operating within a web based network environment, and thus maintains that they are equivalent art.

One of ordinary skill in the art would be motivated to look to the respective teachings of Sequeira, Carpentier, Liu, Marconcini, and Grove. Hindsight has nothing to do with the fact that these prior art are in an equivalent field of endeavor. Equivalent prior art can be combined and this combination would have been obvious to one skilled in the art.

The rejection to each independent and dependent claim includes a citation from the referenced prior art that discloses the basis for the rejection. Each obviousness combination clearly indicates the claim limitation the combined reference prior art teaches. In addition, a cited passage from the referenced prior art clearly indicates the motivation for the obviousness combination.

#### As to Point A.2:

The Sequeira prior art discloses a content delivery system for the delivery of webbased content within a network environment. (see Sequeira col. 2, lines 49-52; col. 2, line 64 - col. 3, line 3) The Sequeira and Carpentier prior art combination discloses the capability to generate (i.e. compute) an identifier from a particular portion of content within a web-based environment. (see Carpentier col. 7, lines 28-33; identifier generated (i.e. computed) from content)

The referenced prior art discloses this claim limitation.

#### As to Point A.3:

The examiner asserts the html web page for content delivery is equivalent to the applicant's invention disclosures in its claim limitations. The Sequeira and Liu prior art combination discloses a capability to lookup information (i.e. based on an identifier) utilizing a cache type technology. (see Liu col. 54, lines 15-23: cache techniques for data management, cache subsystem associates document (content) with categorization (identifiers))

By definition, a cache is a storage medium (i.e. disk or memory) utilized for rapid retrieval of information. The cache utilizes identification information to identify current information within the cache. If the identification information indicates the requested information is in the cache (i.e. identifier is found), then the requested information is retrieved from the cache (i.e. destination). If the identification information indicates the requested information is not in the cache (i.e. identifier is not found), then the requested information is retrieved from the server (i.e. information source).

The preceding definition for a claim limitation in Applicant's Invention is equivalent to a cache. By definition, a cache is a storage medium (i.e. disk or memory) utilized for rapid retrieval of information. The cache utilizes identification information to identify current information within the cache. If the identification information indicates the requested information is in the cache (i.e. identifier is found), then the requested information is retrieved from the cache (i.e. destination). If the identification information indicates the requested information is not in the cache (i.e. identifier is not found), then the requested information is retrieved from the server (i.e. information source).

Cache technology discloses a lookup mechanism equivalent to the claim limitation of the retrieval of information.

This actions described here are the actions of a cache, which is a hardware and software combination well known in the art. The cache definition has been cited multiple times in previous Office Actions.

The referenced prior art discloses this claim limitation.

#### As to Point A.4:

There is no disclosure of any different processing that is based on whether the content is designated as static or dynamic content. The claim limitation merely states the recognition of static or dynamic content

By Applicant's own admission (see Appeal Remarks Page 17, lines 26-28), the Liu prior art recognizes whether content type is static or dynamic. The passage cited by Applicant merely indicates a capability exists to set (i.e. may set) an uncacheable

parameter. There is no disclosure that the setting of this parameter is mandatory.

There is no disclosure to discourage or discredit the capability to not set this parameter and cache dynamic content. If the identifier (i.e. identifiable information) is not found in the cache, then the information is retrieved from content storage. This is functionally equivalent to applicant invention's disclosure.

The referenced prior art discloses this claim limitation.

#### As to Point A.5:

The last Office Action, dated July 18, 2006, disclosed the required citations utilized to reject claims 13, 17, 18, and 19 based on the referenced prior art.

The referenced prior art and citations are hereby incorporated to response to this argument.

The referenced prior art discloses this claim limitation.

#### As to Point A.6:

The Sequeira (6,620,205) prior art discloses a content delivery system for the delivery of web-based content within a network environment. (see Sequeira col. 2, lines 49-52; col. 2, line 64 - col. 3, line 3) The Sequeira (6,620,205) and Carpentier (6,976,165) prior art combination discloses the capability to generate (i.e. compute) an identifier from a particular portion of content within a web based environment. (see Carpentier col. 7, lines 28-33: identifier generated (i.e. computed) from content)

The referenced prior art discloses this claim limitation.

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As to Point A.7:

This is merely the delivery of content utilizing the TCP/IP communications protocol.

An indication (i.e. no indication from specification what type of indicator is required, an

ACK) is received and the content is transmitted. This is merely the standard operation

of a web browser utilizing the TCP communications protocol. And, the Sequeira prior

art disclose wherein the transmission of an identifier to a destination. (see Sequeira col.

6, lines 40-45: identifier transmitted to destination)

The referenced prior art discloses this claim limitation.

As to Point B.1:

The last Office Action, dated July 18, 2006, disclosed the required citations utilized

to reject claims 6-7 is based on the referenced prior art. The rejection of claims 6-7 is

also upheld due to the proper rejection of claim 1 based on the referenced prior art.

Claim 1 was rejected based on the Sequeira, Carpentier, and Liu prior art. The

referenced prior art and citations are hereby incorporated in response to this argument.

The referenced prior art discloses this claim limitation.

As to Point C.1:

The last Office Action, dated July 18, 2006, disclosed the required citations utilized

to reject claims 23-25 is based on the referenced prior art. The rejection of claims 23-

25 is also upheld due to the proper rejection of claim 22 based on the referenced prior

art. Claim 22 was rejected based on the Sequeira, Carpentier, and Liu prior art. The referenced prior art and citations are hereby incorporated in response to this argument.

The referenced prior art discloses this claim limitation.

#### As to Point D.1:

The Sequeira prior art determines based on a user request (see Sequeira col. 4, lines 33-36: user requests content from a web server), which portions of contents to transfer to the destination. The Sequeira prior art discloses which content The Liu prior art is not cited for identifiers. The Sequeira and Carpentier prior art combination is utilized for identifiers computed from a portion of content.

The referenced prior art discloses this claim limitation.

#### As to Point D.2:

The preceding definition is analogous to a cache. By definition, a cache is a storage medium (i.e. disk or memory) utilized for rapid retrieval of information. The cache utilizes identification information to identify current information within the cache. If the identification information indicates the requested information is in the cache (i.e. identifier is found), then the requested information is retrieved from the cache (i.e. destination). If the identification information indicates the requested information is not in the cache (i.e. identifier is not found), then the requested information is retrieved from the server (i.e. information source). (Refer to **As to Point A.3**)

The referenced prior art discloses this claim limitation.

#### Conclusion

The referenced prior art discloses all claims limitations and key points of applicant's invention. The Sequeira prior art discloses the source contents of a web page partitioned into tag delimited and tag identified sections or partitions identified by a tag. (see Sequeira col. 7, lines 21-27: content is divided (delimited) into partitions (i.e. portions)) And, the Sequeira prior art discloses associating an identifier with a particular partition of content, which can be designated as dynamic and static content. (see Sequeira col. 7, lines 31-39: content partitioning (delimited) based on content features (animated graphics or dynamic))

The Sequeira and Carpentier prior art combination discloses wherein an identifier is computed from one or more portions of the content. (see Carpentier col. 6; lines 4-8: digital data ; col. 7, lines 28-33: identifier generated (i.e. computed) from content) And. the Sequeira and Liu prior art combination discloses wherein an identifier is utilized to load content from a local or a remote store, which is equivalent to a cache. (Refer to As to Point A.3)

The referenced prior art disclose content delivery and content manipulation systems operating within a web based network environment. The specifics of each prior art may differ, but all of the referenced prior art operates within the same type of environment utilizing the same type of data.

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(1) Sequeira (6,620,205): (see col. 2, lines 49-52; col. 2, line 64 - col. 3, line 3: content delivery system, web based environment);

- (2) Carpentier (6,976,165): (see col. 6, lines 4-8; col. 13, lines 29-33: content delivery system, web based environment);
- (3) Liu (6,839,680): (see col. 2, lines 22-26: content delivery system, web based environment);
- (4) Marconcini (6,834,110): (see col. 9, lines 30-34; col. 9, lines 38-41; col. 10, lines 20-23: content delivery system, web based environment);
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Internet content manipulation and management system utilizing a request and response mechanism is the category Applicant's Invention is within.

The referenced prior art disclose the display of content utilizing internet technology. Internet (i.e. HTTP) technology utilizes a server that delimits and formats the different types of contents of a web page before transmission to client (i.e. browser). The client follows pre-setup (i.e. HTML delimiting) commands and procedures to parse and format the content for a web page at the server (i.e. source) before transmission and display by a browser.

The referenced prior art disclose the Applicant's Invention essentially as claimed.

Applicant's invention claims a content management and display system utilizing cache type technology for the retrieval of static and dynamic type content from local or remote

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storage based on an identifier. The referenced prior art discloses a content management system with the capability to partition web display content with identifiers and retrieval of content from local or remote storage utilizing an identifier parameter.

This disclosure in the reference prior art is equivalent to Applicant's claimed invention.

The rejection to each independent and dependent claim includes a citation from the referenced prior art that discloses the basis for the rejection. Each obviousness combination clearly indicates the claim limitation the combined reference prior art teaches. In addition, a cited passage from the referenced prior art clearly indicates the motivation for the obviousness combination. Each obviousness combination's disclosure is equivalent to the Applicant's claimed invention.

Applicant's Invention utilizes the widely popular web based technology for its document structure such as a partitioned web page and the well-known cache technology for the retrieval of content from local or remote storage based on a cache determination. This is not a novel idea based on the fact that several prior art references have been found that utilize these well known functional procedures, web based data content manipulation and cache based data retrieval technologies. This is not a novel idea.

In conclusion, the examiner has considered the Applicant's remarks concerning the content management system, which processes a partitioned web page with each partition designated by an identifier and utilizing local and remote storage for content retrieval based on the identifier.

After the additional analysis of the applicant's invention, remarks, and an additional search of the available prior art, it was determined that the current set of prior art consisting of Sequeira (6,620,205), Carpentier (6,976,165), Liu (6,839,680),

Marconcini (6,834,110), and Grove (6,820,133) discloses the Applicant's Invention including disclosures in Appeal Remarks dated October 2, 2006. All claims in Applicant's invention have been rejected as anticipatory or obvious based on the referenced prior art.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

KHS

Kyung H Shin Patent Examiner Art Unit 2143

KHS December 17, 2006

Conferees:

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